Determination of Rangeland Health

The Record of Decision (ROD) for the New Mexico Standards for Public Land Health and Guidelines for Livestock Grazing Management (dated January 2001) adopted three Standards for Public Land Health. These are (1) Upland Sites Standard, (2) Biotic Communities, Including Native, Threatened, Endangered, and Special Status Species Standard and (3) Riparian Sites Standard.

The ROD also established a process for the BLM Field Offices for the implementation. Through a public participation process, the Roswell Field Office developed and adopted indicators to use in conjunction with existing monitoring data to assess these Standards.

Field assessment worksheets and other available data which evaluate the local indicators, were completed for this allotment. Based on the assessments, it is my determination that the Public Lands within the Calumet Ranch Allotment #65069 meets the Upland Sites Standard, (2) Biotic Communities, Including Native, Threatened, Endangered, and Special Status Species Standard and (3) the Riparian Standard.

<u>/s/ T. R. KREAGER</u>

08/25/2003

Assistant Field Manager

Date

Standards of Public Land Health Evaluation of 65069 CALUMET RANCH Allotment [05/02/2003]

The Roswell Field Office conducted rangeland health assessments at nine study sites within the CALUMET RANCH allotment, #65069. The assessments looked at the Soil/Site Stability, Hydrologic Function and Biotic Integrity indicators within the vicinity of each study site. Existing monitoring data was incorporated into and in support of the field assessment. The summary of each assessment is attached and shown in the following table.

Study Area		UPLAND			BIOTIC		I	RIPARIAN	PARIAN	
or Assessment Area	Meets	Monitor an Indicator	Does Not Meet	Meets	Monitor an Indicator	Does Not Meet	Meets	Monitor an Indicator	Does Not Meet	
65069-#1 SPRING-D117	X			X			X	*		
65069-#2 WEST #1- D118	X			X			N/A			
65069-#2 WEST #2- D119	X			X			N/A			
65069-#4 EAST #1- D121 (*)	X			X			N/A			
65069-#4 EAST #2- D122 (*)	X			X			N/A			
65069-#6 WADE-D124 (*)	X			X			N/A			
65069-#7 ODOM-D125 (*)	X			X			N/A			
65069- BLACK-D120	X			X			N/A			
65069- SHIPPING TRAP-D123	X			X			N/A			

Twenty-two (22) indicators for Rangeland Health were evaluated for the Calumet Ranch; 10 of these assessed soil/site stability, 11 assessed hydrologic functions and 13 assessed biotic integrity. These qualitative assessments along with quantitative information from long-term monitoring studies on 9 different trend plots throughout the allotment were utilized to make rangeland health determinations. These quantitative evaluations were performed by the Roswell Field office staff starting in the early 1980's. These data included ground and vegetative cover and composition, production, frequency, and ecological condition as calculated from these collections which have been scheduled approximately every 5 years.

Drought has had an impact on these sites over the last few years. Assessments of the indicators ranged from Moderate to Extreme to None to Slight. Four sites, which represented 4 different pastures, East #1, East #2, Odum, and Wade, had Moderate to Extreme ratings in the invasive plants category. Mesquite (Prosopis glandulosa), and/or creosote (Larrea tridentata) were common on these sites and appear to gradually be invading the area. The ecological site description represented by these plots are shallow SD-3 with the aspect of these sites being made up of mostlly a grassland type. However with the drier, more arid conditions over the last few years, the representative grama grasses are being replaced by silicon-containing perennials like burrograss (Scleropogon brevifolius), threeawns (Aristida spp.), and other increasers which affect palatability to livestock. The Structural/Functional groups for these particular sites are in the Moderate category.

The Spring and West #1 pastures have indicators primarily in the None to Slight to Slight to Moderate category. West #1 is Loamy SD-3 with a Gypsum soil phase. The physical/biological/chemical crust is mostly represented by physical and chemical crusts on these sites and appear to be holding the upper layers of the soil intact. However a point of concern is the early stages of mesquite encroachment on West #1 which may have a possible linkage to soil surface loss, plant community composition and distribution relative to infiltration and runoff and annual production, rating in the Moderate category. Spring pasture has no issues with the exception of annual production and pedestals/terracettes rating in the Moderate category. This suggests influences from drought conditions rather than livestock use.

West #2's indicators rated in the majority of None to Slight to Slight to Moderate category, with the exception of bareground, annual production and invasive plants rating in the Moderate category. But none of these exhibit any real concern at the moment. Favorable precipitation events would further augment this site's potential. Shipping Trap pasture also rated most of the indicators in the None to Slight to Slight to Moderate categories. The only issue is the absence of grama grasses and tobosa (Pleuraphis mutica) which gave a rating of Moderate. However the reproductive capability of the perennial plants to reproduce was not limited. Black pasture also had indicator ratings of None to Slight to Slight to Moderate. Four indicators, however, rated at Moderate; pedestals/terracettes, bareground, litter amount and annual production. There was a generous amount of physical crusting which may be holding the soils in place until

favorable climatic conditions return. This site is loamy SD-3 and exhibits some prickly pear (Opuntia spp.) encroachment but not to the level of limiting this site's potential.

It is the professional opinion of the Assessment Team. that the public land within the Calumet Ranch meets the Upland, Biotic, and Riparian standards. The riparian standard is an issue for Spring Pasture only. See specific site note comments and recommendations for this pasture. In addition, refer to same for West #1 Pasture as it is associated with Spring Pasture in terms of the recommendations.

The (*) indicates that the assessment had one or more indicator(s) rated moderate/extreme or extreme. These indicators are:

- Pedestals and/or Terracettes
- Invasive Plants

These indicators by themselves are not enough to rate the site as not meeting a standard but may warrant future monitoring.

Recommendations: Overall - A more critical evaluation needs to be performed in order to possibly prescribe future vegetation treatments to bring these pastures back to desirable conditions, ie, preferred perennial grasses and palatable shrub or forb species.

Wildlife & Special Status Species: Spring - Remove the public lands in Spring Pasture from the grazing allotment due to wetland-riparian concerns and to serve as a buffer area for the wetlands proper. Negotiate with the State to re-align pasture boundaries to exclude a portion of state land in Section 16 to protect wetland-riparian resources in concert with ACEC overall management objectives. Re-construct necessary pasture/allotment boundary fences. Conduct mesquite control in the loamy areas within the pasture, continue control of invasive saltcedar where found.

West #1 - Construct a pasture boundary fence running along the highway to deter illegal dumping. Continue saltcedar eradication. Conduct mesquite control. Maintain the existing south access road to prevent undue erosion. Incorporate state lands open to grazing in Spring pasture into this pasture, creating one large pasture. Abandon the diagonal fence currently in place.

RFOs Upland and Biotic Standard Assessment Summary Worksheet									
		SITE 65069-#	‡1 S]	PRI	NG-D117	7			
Legal Lan	d Desc	SESE 9 0120S 0260E Meridian 23			A	creage	440)	
	Ecosite				Photo	Taken	Y		
Wa	tershed	13060007010 GOPHE	R						
Ob	servers	NAVARRO/BAGGAO)	(Observation	n Date	06/	26/2003	
	2	NM666 CHAVES SOUTH			Soil Var/	Taxad			
Soil Ma	ap Unit	HrC		5	Soil Taxon	Name	НО	LLOMAN	1
Textur	e Class	NM666 L			Soil	Phase		LLOMAN PSUM L <i>A</i>	
Texture M	odifier	NM666 LOAM							
Observed Avg Annual Precipitation					Observe Growing S Precip	Season			
NOAA . Precij	Annual oitation		9.26		NOAA Gr son Precip	_		5.9	
	A Avg Annual oitation	12.1			NOAA Avg Growing Season Precipitation		10.5		10.52
Disturban					1				
Part 2. Attr	ibutes	and Indicators							
				arture from Ecological Site cription/Ecological Reference Areas					
Attribute	Indicate	ors	Extr	reme	Moderate to Extreme	Moder	ate	Slight to Moderate	None to Slight
S H	Rills								X
Comments:						<u> </u>			
SH	Water 1	Flow Patterns						X	
Comments:									
	Pedesta	als and/or Terracettes				X			
Comments:									
SH	Bare G	round						X	

Comments:					
SH	Gullies				X
Comments:					
S	Wind-scoured, Blowouts, and/or Deposition Areas				X
Comments:					
Н	Litter Movement			X	
Comments:	Litter is moving small distance	S.			
SHB	Soil Surface Resistance to Erosion			X	
Comments:					
SHB	Soil Surface Loss or Degradation			X	
Comments:					
Н	Plant Community Composition and Distribution Relative to Infiltration and Runoff			X	
Comments:					
SHB	Compaction Layer				X
Comments:					
В	Functional/Structural Groups				X
Comments:					
В	Plant Mortality/Decadence				X
Comments:					
НВ	Litter Amount				X
Comments:					
В	Annual Production		X		
Comments:					
В	Invasive Plants				X
Comments:	Prickly Pear throughout the sit	e.			
В	Reproductive Capability of Perennial Plants				X
Comments:					
S	Physical/Chemical/Biological Crusts			X	
Comments:	There is evidence of biological	, physical and chem	ical crusts.		

В	Wildlife Habitat				X				
Comments:	See Site Notes								
В	Wildlife Populations					X			
Comments:	Proghorn antelope occassionally are found in the pasture. Priamry emphasis is waterfowl and shorebirds during the winter season.								
В	Special Status Species Habitat					X			
Comments:	Gyp plants are apparent. An experimental population of Pecos sunflower (federal threatened) has been established at the sinkhole on state land. Pecos pupfish are known to occur in the wetlands.								
В	Special Status Species Populations					X			
Comments:	Gyp plants apparent. Experime Secure pop. of pupfish in wetl		of sunflov	wer appear	to be thriv	ing.			
Part 3. Sun	ımarv								
A. Indicator attributes be	Summary - Each of the indication of the indicator is placed in Standard Attributes.								
Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight			
S	Soil	0	0	1	5	4			
Н	Hydrologic	0	0	1	6	4			
В	Biotic	0	0	1	3	9			
B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the <i>Does not Meet</i> column, Moderate becomes <i>May Need More Info</i> , and Slight to Moderate and None to Slight merge to form the <i>Meets</i> columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.									
	<u>.</u>								
Attribute	Rationale			Does Not Meet	May Need More Info	Meets			

Soil	0	1	9
Hydrologic	0	1	10
Biotic	0	1	12

Site Notes: Spring Pasture Wildlife Habitat Notes - This pasture is located within the Overflow Wetlands Area of Critical Environmental Concern. A majority of the pasture is Gyp Uplands with some loamy inclusions. The actual wetland habitat is along the west margin of the pasture below the gyp hills. It is about 80 acres in size including public and state land. The pasture also contains riparian habitat (sinkhole, two major outflow channels of the wetlands) located on state land. Two large rights-of-way cross the pasture, a large power transmission line (SPS) and a large oil and gas pipeline (Transwestern). Other developments include an access road to a private residence, two-track roads and fences. The loamier sites within the pasture has been invaded by mesquite. The Pecos River does not cross the pasture. Wetland habitat, gypsiferous hills, and karst features add diversity to wildlife habitat in this pasture.

RFOs U	RFOs Upland and Biotic Standard Assessment Summary Worksheet								
		SITE 65069-#	2 WEST	Γ#1-D11	8				
	and esc	SWSW 15 0120S 0260E 23	Meridian		Acreage	1150			
Eco	site			Pho	to Taken	Y			
Waters	hed	13060007040 DEXTER I	EAST						
Observ	vers	SCHMIDT/BAGGAO/NA	AVARRO	Obs	servation Date	06/26/2003			
County S Sur		NM666 CHAVES SOUT	1666 CHAVES SOUTH		ar/Taxad				
Soil Map U	Jnit	nit HrC			oil Taxon Name	HOLLOM	AN		
Texture Class		NM666 L		So	oil Phase	HOLLOMA GYPSUM LAND	AN-		
Texture Modifier NM666 LOAM									
Observed Avg					ved Avg				
Ann					g Season				
Precipitat	uon				Cravina				
NOAA Ann			9.2	III.	Growing Season		5.91		
Precipitat	tion		_	Precipitation		0.51			
NOAA A	Avg			NO	AA Avg				
Ann			12.3				10.71		
Precipitat				Prec	cipitation				
Disturban and Anii U									
Part 2. Attri	ibut	es and Indicators							
				e from Eco	_	ite ence Areas			
Attribute			Extreme	Moderate to Extreme	Moderate	Slight to	None to Slight		
S H	Rills	3					X		
Comments:					L	II.			

— i

SH	Water Flow Patterns					X
Comments:				,		
SH	Pedestals and/or Terracettes				X	
Comments:						
SH	Bare Ground				X	
Comments:						
SH	Gullies					X
Comments:						
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
Н	Litter Movement				X	
Comments:	Evident in open spaces.					
SHB	Soil Surface Resistance to Erosion				X	
Comments:						
SHB	Soil Surface Loss or Degradation			X		
Comments:	Mesquite invasion lowers terra	ce above f	lood plain			
Н	Plant Community Composition and Distribution Relative to Infiltration and Runoff			X		
Comments:	Mesquite invasion.					
SHB	Compaction Layer					X
Comments:						
В	Functional/Structural Groups				X	
Comments:	Mesquite invasion.					
В	Plant Mortality/Decadence					X
Comments:						
НВ	Litter Amount				X	
Comments:						
В	Annual Production			X		
Comments:						
В	Invasive Plants			X		
Comments:	Mesquite scattered					

В	Reproductive Capability of Perennial Plants					X			
Comments:									
S	Physical/Chemical/Biological Crusts					X			
Comments:	Physical crusts evident.								
В	Wildlife Habitat			X					
Comments:	Prosopis and Tamarix invasion on uplands and loamy sites. No riparian resources to be concerned with.								
В	Wildlife Populations				X				
Comments:	Pronghorn antelope occassionally utilize this pasture. Upland game birds also may be found.								
В	Special Status Species Habitat					X			
Comments:	None known to occur.								
В	Special Status Species Populations					X			
Comments:	None known to occur.					<u>-</u>			
Part 3. Sun	nmary								
A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.									
Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight			
S	Soil	0	0	1	3	6			

B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the *Does not Meet* column, Moderate becomes *May Need More Info*, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Н

В

Hydrologic

Biotic

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		0	1	9
Hydrologic		0	2	9
Biotic	Mesquite invasion can be found in the loamier sites within the pasture, replacing grassland avifaunal species with those that can utilize brushier habitat.	0	4	9

Site Notes: Wildlife & Special Status Species - This pasture is found within the Overflow Wetlands Area of Critical Environmental Concern. It contains what is called the "South Access Road" to the wetlands that originates off of State Road 409. The east portion of this pasture follows the state road which is the east boundary of the ACEC. It is unfenced at this time. Illegal dumping has occurred in the area. Recently, the south access road was improved for use by Transwestern Pipeline for the intent of bringing in heavy equipment to directionally drill under the Pecos River. The road improvement should alleviate some erosion problems that have occurred over time. A major power transmission line and access road runs diagonally through the pasture. This pasture also includes significant acreage of state land.

RFOs	Upland	and Biotic Standa	rd As	sessment S	ummary	Workshe	eet	
		SITE 65069-#	2 WF	EST #2-D11	9			
Legal La	nd Desc	NWSE 26 0120S 026 Meridian 23	0E		Acreage	2812		
	Ecosite			Pho	oto Taken	Y		
W	atershed	13060007040 DEXTI EAST	ER					
O	bservers	NAVARRO/BAGGA	O	Observa	tion Date	07/07/2003	3	
County Soil	Survey	NM666 CHAVES SC	UTH	Soil V	ar/Taxad			
Soil M	Iap Unit	RL		Soil Tax	on Name	REEVES		
Textu	re Class	NM666 L		S	COIL Phace	REEVES- HOLLOM	AN	
Texture N	Modifier	NM666 LOAM						
Observed Avg Annual Precipitation				Growin	rved Avg ng Season cipitation			
NOAA Annual Precipitation			9.26	NOAA Growing			5.91	
	AA Avg Annual ipitation		12.3		Growing cipitation		10.71	
Disturbar	-							
Part 2. Att	ributes a	and Indicators						
				rture from Ecological Site ription/Ecological Reference Areas				
Attribute	Indicato	ors	Extre	me to Extreme	Moderate	Slight to Moderate	None to Slight	
S H	Rills						X	
Comments:			-					
SH	Water F	Flow Patterns					X	
Comments:								
SH	Pedesta	ls and/or Terracettes				X		
Comments:								
SH	Bare Gr	ound			X			

Comments:				
SH	Gullies			X
Comments:				
S	Wind-scoured, Blowouts, and/or Deposition Areas			X
Comments:				
Н	Litter Movement			X
Comments:				
SHB	Soil Surface Resistance to Erosion		X	
Comments:				
SHB	Soil Surface Loss or Degradation		X	
Comments:				
Н	Plant Community Composition and Distribution Relative to Infiltration and Runoff		X	
Comments:				
SHB	Compaction Layer		X	
Comments:				
В	Functional/Structural Groups		X	
Comments:				
В	Plant Mortality/Decadence			X
Comments:				
НВ	Litter Amount		X	
Comments:				
В	Annual Production	X		
Comments:	Prosopis evident.			
В	Invasive Plants	X		
Comments:				
В	Reproductive Capability of Perennial Plants		X	
Comments:				
S	Physical/Chemical/Biological Crusts		X	
Comments:	Some physical crusts.			

-								
В	Wildlife Habitat				X			
Comments:	Grasslands with some scatterre	ed mesquite.						
В	Wildlife Populations			X				
Comments:	Expect Pronghorn antelope and upland game birds.							
В	Special Status Species Habitat				X			
Comments:	None known to occur.							
В	Special Status Species Populations				X			
Comments:	None known to occur.							
Part 3. Sun	Part 3. Summary							
attributes be	A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.							

Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	1	5	4
H	Hydrologic	0	0	1	6	4
В	Biotic	0	0	2	7	4

B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the *Does not Meet* column, Moderate becomes *May Need More Info*, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		0	1	9
Hydrologic		0	1	10
Biotic		0	2	11

Site Notes:	

RFOs	Upland :	and Biotic Standa	rd Asso	essment Si	ımmary V	Vorksh	eet
		SITE 65069-#	44 EAS	T #1-D121			
Legal L	Land Desc SWSE 28 0120S 02' Meridian 23		70E	Acreage		e 2604	
	Ecosite				Photo Take	n Y	
V	Vatershed	13060007040 DEXT EAST	TER				
(Observers	NAVARRO/BAGG	AO	Obse	rvation Dat	e 07/03/2	2003
County So	oil Survey	NM666 CHAVES S	OUTH	So	il Var/Taxa	d	
Soil	Map Unit	TS		Soil	Гахоп Nam	e TENCI	EE
Text	ture Class	NM666 GR-FSL			Soil Phas	e TENCI SOTIM	
Texture	Modifier	NM666 GRAVELL SAND	Y FINE			,	
Obse Annual Pre	erved Avg ecipitation			Observed A Season	vg Growin Precipitatio		
	A Annual cipitation		9.26		NOAA Growing Season Precipitation		5.91
NOAA Av Pre	g Annual ecipitation		12.3	NOAA Avg Growing Season Precipitation			10.71
	ances and imal Use:						
Part 2. Att	ributes ar	nd Indicators					
				ure from Eco otion/Ecolog			
Attribute	Indicator	S	Extrem	Moderate to Extreme		Slight to Moderate	None to Slight
S H	Rills						X
Comments:							
SH	Water Fl	ow Patterns			X		
Comments:							
SH	Pedestals	and/or Terracettes		X			
Comments:							
SH	Bare Gro	ound				X	

Comments:		
SH	Gullies	X
Comments:		
S	Wind-scoured, Blowouts, and/or Deposition Areas	
Comments:		
Н	Litter Movement X	
Comments:	Wind and water movement.	
SHB	Soil Surface Resistance to Erosion X	
Comments:		
SHB	Soil Surface Loss or Degradation	
Comments:	Some deposition.	
Н	Plant Community Composition and Distribution Relative to Infiltration and Runoff X	
Comments:	Prosopis evident.	
SHB	Compaction Layer X	
Comments:		
В	Functional/Structural Groups X	
Comments:	Prosopis invading.	
В	Plant Mortality/Decadence X	
Comments:	Only slightly.	
НВ	Litter Amount	X
Comments:		
В	Annual Production X	
Comments:		
В	Invasive Plants X	
Comments:	Prosopis.	
В	Reproductive Capability of Perennial Plants X	
Comments:	Tillering evident.	
S	Physical/Chemical/Biological Crusts X	
Comments:		

В	Wildlife Habitat				X	
Comments	Grassland habitat with mesqu	ite invasio	on.			
В	Wildlife Populations					X
Comments	Pronghorn antelope, mule deed by mesquite shifting species w				d habitat ir	ıvaded
В	Special Status Species Habitat					X
Comments	Small prairie dog colony discollying area.	overed at	the 1/4 sec	tion of 32 a	and 33 in a	low-
В	Special Status Species Populations					X
Comments	Prairie dog colony appears to	be stable.	Need to G	PS the tow	'n.	
Part 3. Su	mmarv					
A. Indicato attributes b	r Summary - Each of the indicated in					
A. Indicate attributes be each of the Standard	r Summary - Each of the indica		Moderate to) above an	d summed Slight to	None to
A. Indicate attributes be each of the Standard Attribute	r Summary - Each of the indicatelow. An indicator is placed in Standard Attributes.	a category Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Sligh
A. Indicate attributes be each of the Standard Attribute	r Summary - Each of the indicate elow. An indicator is placed in Standard Attributes. Soil	Extreme 0	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
A. Indicate attributes be each of the Standard Attribute S	Soil Hydrologic	Extreme 0 0	Moderate to Extreme	Moderate 3 3	Slight to Moderate	None to Sligh
A. Indicate attributes be each of the Standard Attribute	r Summary - Each of the indicate elow. An indicator is placed in Standard Attributes. Soil	Extreme 0	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		1	3	6

Hydrologic	1	3	7
Biotic	1	3	9

Site Notes: Note: Newly-discovered prairie dog colony in 1/4 section of 32 and 33. Need to GPS location and protect from surface disturbance.

RFOs	Upland :	and Biotic Standa	rd Asso	essment Su	ımmary \	Worksh	eet
		SITE 65069-#	44 EAS	T #2-D122	2		
Legal L	and Desc	NESE 23 0120S 027 Meridian 23	70E		Acreas	ge 0	
	Ecosite				Photo Take	en Y	
W	atershed	13060007040 DEXT EAST	ΓER				
(Observers	NAVARRO/BAGG	AO	Obse	rvation Da	te 07/03/2	2003
County So	il Survey	NM666 CHAVES S	OUTH	So	il Var/Taxa	nd	
Soil I	Map Unit	TS		Soil	Taxon Nan	ne TENCI	EΕ
Text	ure Class	NM666 GR-FSL			Soil Phas	TENCI SOTIM	
Texture	Modifier	NM666 GRAVELL' SAND	Y FINE				
Obser Annual Pred	rved Avg cipitation			Observed A Season	vg Growir Precipitation		
	A Annual cipitation		9.26		NOAA Growing Season Precipitation		5.91
NOAA Av Pre	g Annual cipitation		12.3		NOAA Avg Growing Season Precipitation		10.71
	nces and mal Use:						
Part 2. Attı	ributes ar	nd Indicators					
				ure from Eco otion/Ecolog			}
Attribute	Indicator	S	Extrem	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
SH	Rills					X	
Comments:							
SH	Water Fl	ow Patterns			X		
Comments:							
SH	Pedestals	and/or Terracettes			X		
Comments:							
SH	Bare Gro	ound			X		

Comments:	Approaches upper end.				
SH	Gullies		X		
Comments:					
S	Wind-scoured, Blowouts, and/or Deposition Areas		X		
Comments:					
Н	Litter Movement			X	
Comments:					
SHB	Soil Surface Resistance to Erosion			X	
Comments:					
SHB	Soil Surface Loss or Degradation			X	
Comments:					
Н	Plant Community Composition and Distribution Relative to Infiltration and Runoff		X		
Comments:	Prosopis invasion.				
SHB	Compaction Layer				X
Comments:					
В	Functional/Structural Groups		X		
Comments:	Larrea and Prosopis.				
В	Plant Mortality/Decadence				X
Comments:					
НВ	Litter Amount			X	
Comments:					
В	Annual Production		X		
Comments:	Near potential.				
В	Invasive Plants	X			
Comments:					
В	Reproductive Capability of Perennial Plants			X	
Comments:	Prosopis invasion.				
S	Physical/Chemical/Biological Crusts			X	
Comments:					

В	Wildlife Habitat				X		
Comments:	Upland terrace 200 feet higher a mixture of mesquite and cred utilize breaks and draws, and u of non-game terrestrial species	osote on g apland ga	gravelly so me birds s	ils. Expect	mule deer	to	
В	Wildlife Populations				X		
Comments:	No specific information availar species to shrubland species or scattered in the area.				_		
В	Special Status Species Habitat					X	
Comments:	None known to occur.						
В	Special Status Species Populations					X	
Comments:	None known to occur.						
Part 3. Sun	nmary						
attributes be	Summary - Each of the indicate low. An indicator is placed in a Standard Attributes.						
Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight	
S	Soil	0	0	5	4	1	
Н	Hydrologic	0	0	5	5	1	
В	Biotic	0	1	2	6	4	
B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the <i>Does not Meet</i> column, Moderate becomes <i>May Need More Info</i> , and Slight to Moderate and None to Slight merge to form the <i>Meets</i> columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.							
Attribute	Rationale			Does Not Meet	May Need More	Meets	

			Info			
Soil		0	5	5		
Hydrologic		0	5	6		
Biotic		1	2	10		
Site Notes: Pasture is all State Land						

RFOs	Upland a	and Biotic Standa	rd Ass	essment Si	ummary	Worksh	eet
		SITE 65069-	#6 WA	DE-D124			
Legal L	and Desc	SESE 6 0130S 0270 Meridian 23	Е		Acreas	ge 607	
	Ecosite				Photo Take	en Y	
V	Vatershed	13060007040 DEXT EAST	ΓER				
(Observers	NAVARRO/BAGG	AO	Obse	rvation Da	te 07/07/2	2003
County Sc	oil Survey	NM666 CHAVES S	OUTH	So	il Var/Taxa	nd	
Soil	Map Unit	TS		Soil '	Taxon Nan	ne TENCI	EΕ
Text	ure Class	NM666 GR-FSL			Soil Pha	TENCI SOTIM	
Texture	Modifier	NM666 GRAVELL' FINE SAND	Y			'	
Obse Annual Pre	rved Avg cipitation			Observed A Season	Avg Growir Precipitation	• II	
	A Annual cipitation		9.26		AA Growir Precipitation	• II	5.91
NOAA Av Pre	g Annual cipitation		12.3		Avg Growin Precipitation	• II	10.71
	ances and imal Use:						
Part 2. Att	ributes an	d Indicators					
				ure from Eco otion/Ecolog			}
Attribute	Indicator	s	Extrem	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
SH	Rills						X
Comments:	23115		<u> </u>				
S H	Water Flo	ow Patterns				X	
Comments:							
S H		and/or Terracettes			X		
Comments:			L			<u> </u>	
S H	Bare Gro	und			X		
	1 3 3		<u> </u>				<u> </u>

Comments:						
SH	Gullies				X	
Comments:	Roads causing gullying.					
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
Н	Litter Movement				X	
Comments:						
SHB	Soil Surface Resistance to Erosion				X	
Comments:						
SHB	Soil Surface Loss or Degradation				X	
Comments:						
Н	Plant Community Composition and Distribution Relative to Infiltration and Runoff				X	
Comments:	Larrea (Creosote) has only a m	inor effect	on infiltr	ation.		
SHB	Compaction Layer					X
Comments:						
В	Functional/Structural Groups				X	
Comments:						
В	Plant Mortality/Decadence				X	
Comments:						
НВ	Litter Amount			X		
Comments:						
В	Annual Production			X		
Comments:						
В	Invasive Plants		X			
Comments:	Larrea increasing in area.					
В	Reproductive Capability of Perennial Plants				X	
Comments:						
S	Physical/Chemical/Biological Crusts					X
Comments:	Weak physical crusting.					

В	Wildlife Habitat				X	
Comments:	Grassland invaded by mesquit	e and cree	osote, or co	ould be an	ecotone.	
В	Wildlife Populations				X	
Comments:	No specific information for the utilize habitat. Expect a shift fover time.					-
В	Special Status Species Habitat					X
Comments:	None known to occur.					
В	Special Status Species Populations					X
Comments:	None known to occur.					
Part 3. Sun	nmary					
attributes be	Summary - Each of the indical selow. An indicator is placed in Standard Attributes.					
attributes be	elow. An indicator is placed in					
attributes be each of the Standard Attribute	elow. An indicator is placed in	a category	y (columns Moderate to) above an	d summed Slight to	None to
attributes be each of the Standard	elow. An indicator is placed in Standard Attributes.	a category Extreme	Moderate to Extreme) above an	Slight to Moderate	None to Slight
attributes be each of the Standard Attribute	elow. An indicator is placed in Standard Attributes. Soil	Extreme 0	Moderate to Extreme	Moderate	Slight to Moderate	None to Sligh

Attribute	Rationale	Does Not Meet	More	Meets
			Info	
Soil		0	2	8

Hydrologic	0	3	8
Biotic	1	2	10
Site Notes:			

RFOs	Upland a	and Biotic Standa	rd Asso	essment Su	ummary	Worksho	eet
		SITE 65069-	#7 OD	OM-D125			
Legal I	and Desc	NESW 9 0130S 027 Meridian 23	0E		Acreas	ge 2171	
	Ecosite				Photo Take	en Y	
V	Vatershed	13060007040 DEXT EAST	ER				
	Observers	NAVARRO/BAGG	AO	Obse	rvation Da	te 07/07/2	2003
County So	oil Survey	NM666 CHAVES S	OUTH	So	il Var/Taxa	ad	
Soil	Map Unit	TS		Soil	Гахоп Nan	ne TENCI	EE
Tex	ture Class	NM666 GR-FSL			Soil Pha	se TENCI SOTIM	
Texture	Modifier	NM666 GRAVELL' SAND	Y FINE				
Obse Annual Pre	erved Avg ecipitation			Observed A Season	vg Growin Precipitation	O	
	A Annual ecipitation		9.26		AA Growin Precipitation	• II	5.91
NOAA Av	g Annual ecipitation		12.3		vg Growir Precipitation		10.71
	ances and imal Use:						
Part 2. Att	ributes ar	nd Indicators					
				ure from Eco otion/Ecolog			
Attribute	Indicator	S	Extrem	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills						X
Comments:				I I			
SH	Water Fl	ow Patterns				X	
Comments:							
SH		and/or Terracettes				X	
Comments:							
SH	Bare Gro	ound			X		

Comments:					
SH	Gullies			X	
Comments:					
S	Wind-scoured, Blowouts, and/or Deposition Areas				X
Comments:					
Н	Litter Movement				X
Comments:					
SHB	Soil Surface Resistance to Erosion			X	
Comments:					
SHB	Soil Surface Loss or Degradation			X	
Comments:					
Н	Plant Community Composition and Distribution Relative to Infiltration and Runoff			X	
Comments:					
SHB	Compaction Layer				X
Comments:					
В	Functional/Structural Groups		X		
Comments:	Prosopis in area.				
В	Plant Mortality/Decadence				X
Comments:					
НВ	Litter Amount			X	
Comments:					
В	Annual Production		X		
Comments:					
В	Invasive Plants	X			
Comments:	Prosopis invading.				
В	Reproductive Capability of Perennial Plants		X		
Comments:	Prosopis somewhat inhibiting.				
S	Physical/Chemical/Biological Crusts			X	
Comments:	Very shallow weak crusts.				

В	Wildlife Habitat			X		
Comments:	Heavy mesquite invasion. Hall Extreme. Hills are a small por located on a hill, but the overaby mesquite. Definite shift of vegetative community.	tion of the	e overall al	lotment. The appears	he study si to be inva	
В	Wildlife Populations			X		
Comments:	Numerous terrestrial species phabitat type, even with occurrenthe area.					
В	Special Status Species Habitat					X
Comments:	None known to occur.					
В	Special Status Species Populations					X
Comments:	None known to occur.					
attributes b	nmary r Summary - Each of the indicate elow. An indicator is placed in Standard Attributes.					
A. Indicato attributes b each of the Standard	r Summary - Each of the indicated in elow. An indicator is placed in		(columns Moderate to		d summed Slight to	None to
A. Indicato attributes b each of the Standard Attribute	r Summary - Each of the indicatelow. An indicator is placed in Standard Attributes.	a category Extreme	Moderate to Extreme) above an	Slight to Moderate	None to Sligh
A. Indicato attributes be each of the Standard Attribute	r Summary - Each of the indicatelow. An indicator is placed in Standard Attributes. Soil	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Sligh
A. Indicato attributes b each of the	r Summary - Each of the indicatelow. An indicator is placed in Standard Attributes.	a category Extreme	Moderate to Extreme) above an	Slight to Moderate	None to Sligh
A. Indicato attributes beach of the each of the Standard Attribute S H B B. Attribute table above More Info, Values from determinati ID team collead to the	r Summary - Each of the indicate low. An indicator is placed in Standard Attributes. Soil Hydrologic	Extreme 0 0 treme and eet columne to Sligh ow. Space tainly be u ues. Provioriate box	Moderate to Extreme 0 1 d Extreme in, Moderate is provide is extreme ide the sou	Moderate 1 1 5 to Moderate becomes of form the determinates of information and the determinates of information and the determinates of information and the determination and th	Slight to Moderate 6 7 3 te columns s May Nee Meets columale of the ination by ormation the	None to Sligh 3 4 sin the damns.

		More Info	
Soil	0	1	9
Hydrologic	0	1	10
Biotic	1	5	7
Site Notes:			

RFOs U	U pla r	nd and Biotic Standa	rd Asses	ssment Su	ımmary	Workshe	eet
		SITE 65069	-BLAC	K-D120			
Legal Land	LIACC	NWSE 20 0120S 0270E Meridian 23			Acreage	803	
Е	cosite			Ph	oto Taken	Y	
Wate	rshed	13060007040 DEXTER	EAST				
Obse	ervers	NAVARRO/BAGGAO	MCGEE	Observa	ation Date	07/03/200)3
County Si	y Soil urvey	NM666 CHAVES SOU	TH	Soil V	/ar/Taxad		
Soil Map) Unit	RL		Soil Tax	xon Name	REEVES	
Texture	Class	NM666 L		S	Soil Phase	REEVES- HOLLOM	
Texture Mo	difier	NM666 LOAM					
Observed A Precipit	nnual			Growin	erved Avg ng Season ecipitation		
NOAA A			9.26	5	Growing Season ecipitation		5.91
NOAA A Precipi	nnual		12.3	Growin	OAA Avg ng Season ecipitation		10.71
Disturbance Animal	es and					1	
Part 2. Attr	ibute	s and Indicators					
			_	e from Eco ion/Ecolog	_		
Attribute	Indica	ators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
SH	Rills						X
Comments:							
SH	Water	r Flow Patterns					X
Comments:							
SH	Pedes	tals and/or Terracettes			X		
Comments:							

SH	Bare Ground		X		
Comments:					
SH	Gullies			X	
Comments:					
S	Wind-scoured, Blowouts, and/or Deposition Areas			X	
Comments:					
Н	Litter Movement			X	
Comments:					
SHB	Soil Surface Resistance to Erosion			X	
Comments:					
SHB	Soil Surface Loss or Degradation			X	
Comments:	Dessication due to mud cracki	ng.	 		
Н	Plant Community Composition and Distribution Relative to Infiltration and Runoff				X
Comments:			 		
SHB	Compaction Layer				X
Comments:			 		
В	Functional/Structural Groups			X	
Comments:	Gramas lacking on site.		 		
В	Plant Mortality/Decadence			X	
Comments:					
НВ	Litter Amount		X		
Comments:					
В	Annual Production		X		
Comments:	Absence of gramas and tobosa				
В	Invasive Plants			X	
Comments:					
В	Reproductive Capability of Perennial Plants			X	
Comments:					
S	Physical/Chemical/Biological Crusts				X

Comments						
В	Wildlife Habitat					X
Comments	Flat grasslands. Very dry cond	itions evi	dent.			
В	Wildlife Populations					X
Comments	Drought conditions affecting p birds may be present in the are		n of prongh	orn antelo	pe. Upland	l gam
В	Special Status Species Habitat					X
Comments	None known to occur.					
В	Special Status Species Populations					X
Comments	None known to occur.					
Part 3 Su	nmary					
	r Summary - Each of the indicat					
A. Indicato attributes b						
A. Indicato attributes be each of the Standard	r Summary - Each of the indicat elow. An indicator is placed in a Standard Attributes.					
A. Indicato attributes beach of the Standard Attribute	r Summary - Each of the indicat elow. An indicator is placed in a Standard Attributes.	a category	y (columns Moderate to) above an	d summed Slight to	None to
A. Indicato attributes be each of the Standard Attribute	r Summary - Each of the indicat elow. An indicator is placed in a Standard Attributes.	e category Extreme	Moderate to Extreme) above an	Slight to Moderate	None to Sligh
A. Indicato attributes b	r Summary - Each of the indicatelow. An indicator is placed in a Standard Attributes. Soil	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight

table above are merged for the *Does not Meet* column, Moderate becomes *May Need More Info*, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		0	2	8

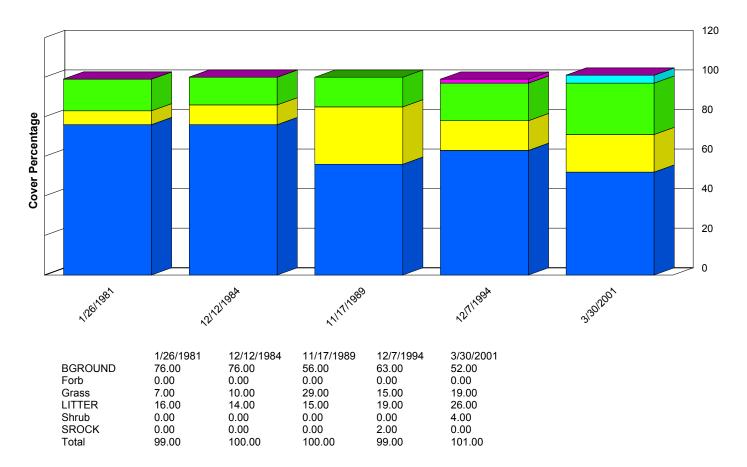
Hydrologic	0	3	8		
Biotic	0	2	11		
Site Notes:					

RFOs	Uplan	d and Biotic Standa	rd Asses	ssn	nent Sı	ımmary	Wa	rkshe	eet
		SITE 65069-SHI	PPING	TI	RAP-D	123			
Legal Lan	d Desc	SWSW 32 0120S 0270 Meridian 23)E			Acrea	ıge	315	
]	Ecosite					Photo Tak	en	Y	
Wa	tershed	13060007040 DEXTE	R EAST						
Ob	servers	NAVARRO/BAGGAO	D/MCGEI	Ξ	Obse	ervation Da	ate	07/03/2	2003
Cour	ity Soil Survey	NM666 CHAVES SO	UTH		Sc	oil Var/Tax	ad		
Soil Ma	ap Unit	TS			Soil	Taxon Nai	me	TENC	EE
Textur	e Class	NM666 FSL				Soil Pha	ase	TENC: SOTIM	
Texture M	odifier	NM666 GRAVELLY SAND	FINE						
	ed Avg Annual oitation				Gro	Observed A owing Seas Precipitati	on		
NOAA . Precij	Annual oitation		9.2	26		AA Growi Precipitati			5.91
_	A Avg Annual oitation		12	.3	Gro	NOAA A owing Seas Precipitati	on		10.71
Disturbane Anim	ces and al Use:								
Part 2. Attı	ributes	and Indicators							
						ological Sit ical Refere		Areas	
Attribute	Indicat	cors	Extreme		oderate to xtreme	Moderate		ght to derate	None to Slight
S H	Rills								X
Comments:									
SH	Water	Flow Patterns							X
Comments:									
SH	Pedest	als and/or Terracettes							X
Comments:									

SH	Bare Ground		X	
Comments:				
SH	Gullies			X
Comments:				
S	Wind-scoured, Blowouts, and/or Deposition Areas			X
Comments:				
Н	Litter Movement			X
Comments:				
SHB	Soil Surface Resistance to Erosion		X	
Comments:				
SHB	Soil Surface Loss or Degradation		X	
Comments:		 		
Н	Plant Community Composition and Distribution Relative to Infiltration and Runoff			X
Comments:				
SHB	Compaction Layer			X
Comments:		 		
В	Functional/Structural Groups			X
Comments:		 		
В	Plant Mortality/Decadence			X
Comments:	Low amount of decadence.			
НВ	Litter Amount		X	
Comments:				
В	Annual Production		X	
Comments:				
В	Invasive Plants	X		
Comments:	Prickly pear.			
В	Reproductive Capability of Perennial Plants			X
Comments:				
S	Physical/Chemical/Biological Crusts		X	

Comments:						
В	Wildlife Habitat					X
Comments:	Grassland habitat with some sethat contributes to habitat dive		-	_		
В	Wildlife Populations					X
Comments:	Expect pronghorn antelope, m information for this area.	ule deer a	nd upland	game bird	s. No speci	ific
В	Special Status Species Habitat					X
Comments:	None known to occur.					
В	Special Status Species Populations					X
Comments:	None known to occur.					
Part 3. Sun	nmary					
attributes be	Summary - Each of the indicate low. An indicator is placed in Standard Attributes.					
Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	0	4	6
Н	Hydrologic	0	0	0	4	7
В	Biotic	0	0	1	4	8
table above More Info, a Values from determination ID team con lead to the control of the contro	Summary. In this table, the Exare merged for the <i>Does not M</i> and Slight to Moderate and Non the table are summarized below. This space should most certaflicts with the summarized valletermination. X out the appropriate determination by the ID team.	ne to Sliglow. Space tainly be uues. Provintate box	in, Modera nt merge to is provide used when ide the sou	te becomes form the d d for ration the determ rces of info	s May Need Meets colunale of the ination by ormation the denote fina	d mns. the
Attribute	Rationale			Does Not Meet	May Need More Info	Meets

Soil	0	0	10
Hydrologic	0	0	11
Biotic	0	1	12
Site Notes:			



SROCK Shrub

LITTER
Grass
Forb
BGROUND

Report Parameters

SITE NAME LIKE 65069-#1 SPRING-D117

ON/AFTER 10/01/1980 ON/BEFORE 09/30/2001

Report Parameters

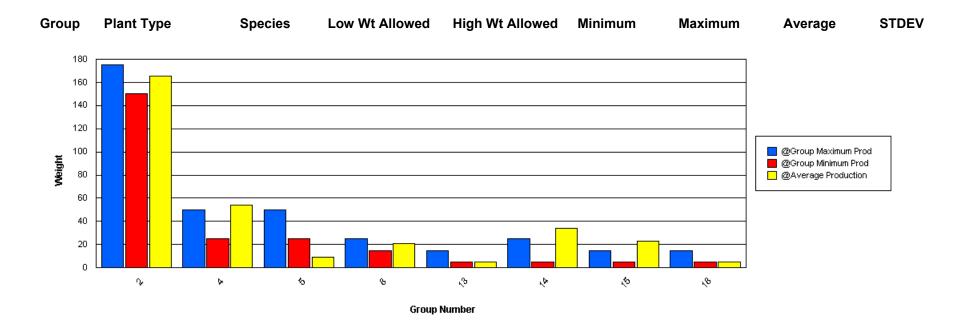
SITE NAME LIKE 65069-#1 SPRING-D117

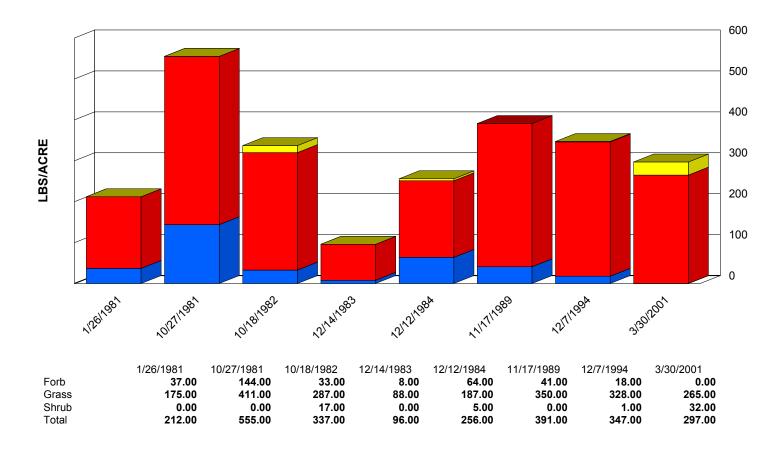
ON/AFTER 10/01/1979 ON/BEFORE 09/30/2001

MIN LBS TO GRAPH 3

SELECTED ECOSITE 042CY006NM

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
2	Grass	BOBR	150	175	0.00	282.00	122.75	82.98
2	Grass	BOER4	150	175	12.00	106.00	42.88	32.82
4	Grass	BOGR2	25	50	0.00	1.00	0.20	0.40
4	Grass	SPCR	25	50	4.00	7.00	5.50	1.50
4	Grass	SPNE	25	50	0.00	90.00	48.13	29.16
5	Grass	ERPU8	25	50	0.00	18.00	4.00	5.95
5	Grass	SCBR2	25	50	2.00	8.00	5.33	2.49
7	Grass	ENDE	5	15	0.00	9.00	1.67	3.30
8	Grass	HIMU2	15	25	0.00	85.00	21.00	28.69
11	Forb	COCA2	25	75	0.00	4.00	0.88	1.36
12	Forb	PSTA	5	25	0.00	12.00	2.00	4.47
13	Forb	GACO	5	15	0.00	6.00	1.20	2.40
13	Forb	OENOT	5	15	0.00	20.00	4.00	8.00
14	Forb	AAFF	5	25	0.00	98.00	25.13	30.82
14	Forb	PECTI	5	25	0.00	35.00	8.75	15.16
15	Forb	HASP2	5	15	0.00	3.00	0.60	1.20
15	Forb	LEMO2	5	15	0.00	11.00	3.17	4.10
15	Forb	MACHA4	5	15	0.00	5.00	0.83	1.86
15	Forb	PPFF	5	15	9.00	24.00	16.50	7.50
15	Forb	SPHAE	5	15	2.00	2.00	2.00	0.00
16	Shrub	EPTO	15	35	0.00	3.00	0.50	1.12
18	Shrub	OPUNT	5	15	0.00	17.00	5.00	7.01





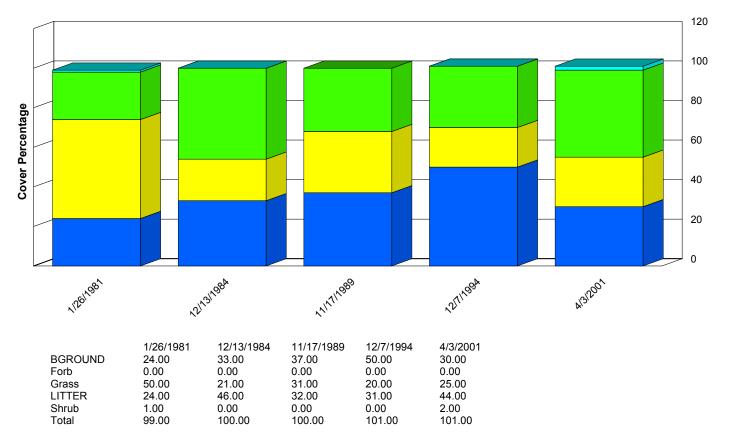
Shrub

Grass
Forb

Report Parameters

SITE NAME LIKE 65069-#1 SPRING-D117

ON/AFTER 10/01/1980 ON/BEFORE 09/30/2001



Shrub
LITTER

Grass
Forb
BGROUND

Report Parameters

SITE NAME LIKE 65069-#2 WEST #1-D118

ON/AFTER 10/01/1980 ON/BEFORE 09/30/2001

Report Parameters

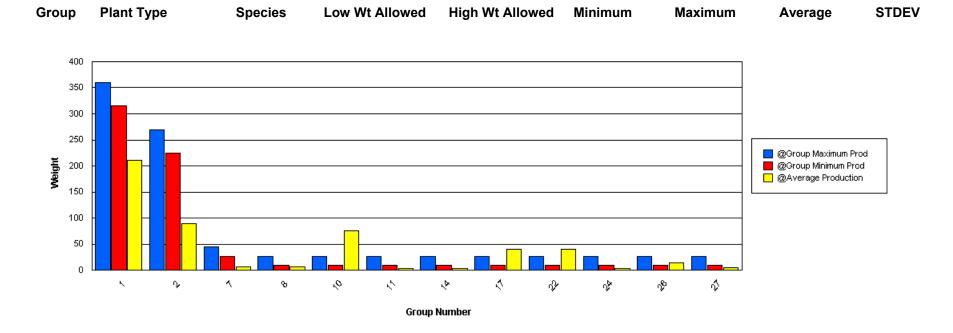
SITE NAME LIKE 65069-#2 WEST #1-D118

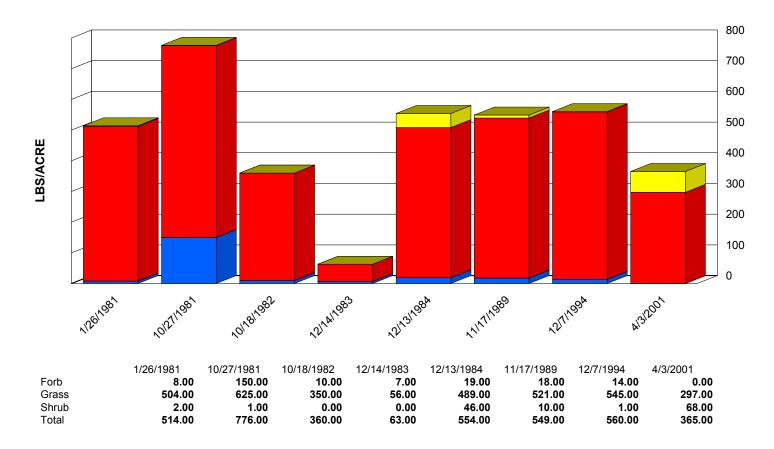
ON/AFTER 10/01/1979 ON/BEFORE 09/30/2001

MIN LBS TO GRAPH 3

SELECTED ECOSITE 042CY007NM

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
1	Grass	HIMU2	315	360	8.00	383.00	197.75	129.79
1	Grass	SCBR2	315	360	2.00	39.00	13.75	11.29
2	Grass	BOER4	225	270	7.00	179.00	86.38	69.57
2	Grass	BOGR2	225	270	0.00	17.00	3.40	6.80
7	Grass	ARIST	27	45	0.00	3.00	0.71	1.16
7	Grass	SPCR	27	45	0.00	18.00	5.43	5.42
8	Grass	PAOB	9	27	0.00	43.00	7.17	16.03
9	Grass	MUAR	27	45	0.00	7.00	1.63	2.29
9	Grass	MUAR2	27	45	0.00	3.00	0.88	1.17
10	Grass	BOBR	9	27	0.00	334.00	75.86	114.74
11	Grass	ENDE	9	27	0.00	8.00	3.50	3.61
12	Grass	PAHA	9	18	0.00	6.00	2.38	2.06
14	Grass	TRMU	9	27	0.00	9.00	3.00	4.24
15	Grass	TRPI2	0	9	0.00	1.00	0.20	0.40
16	Grass	AAGG	9	27	0.00	8.00	2.80	3.49
17	Grass	ERPU8	9	27	0.00	13.00	3.50	4.57
17	Grass	SPNE	9	27	13.00	112.00	36.17	35.29
18	Forb	SPHAE	9	27	0.00	2.00	0.57	0.73
21	Forb	LEMO2	9	27	0.00	3.00	0.80	1.17
22	Forb	AAFF	9	27	0.00	19.00	10.50	6.02
22	Forb	PECTI	9	27	0.00	122.00	30.50	52.83
24	Forb	COHI	9	27	0.00	6.00	1.50	2.60
24	Forb	PPFF	9	27	1.00	2.00	1.50	0.50
26	Shrub	GUSA2	9	27	0.00	19.00	3.33	7.02
26	Shrub	OPUNT	9	27	0.00	67.00	10.43	23.11
27	Shrub	COCA17	9	27	0.00	27.00	4.50	10.06





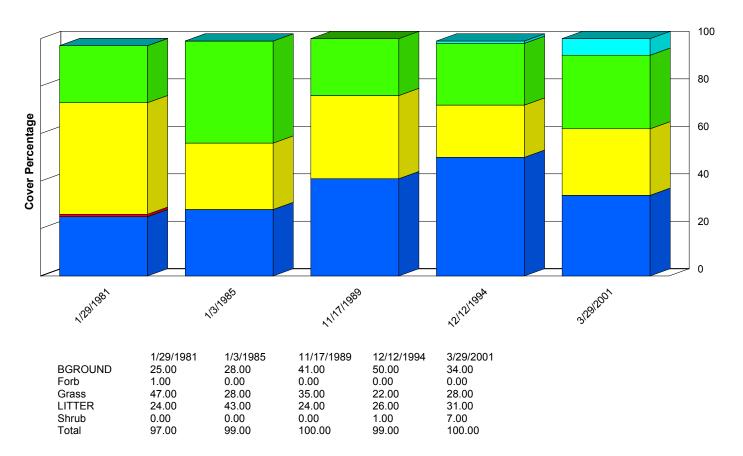
Shrub

Grass
Forb

Report Parameters

SITE NAME LIKE 65069-#2 WEST #1-D118

ON/AFTER 10/01/1980 ON/BEFORE 09/30/2001



Shrub
LITTER
Grass
Forb

BGROUND

Report Parameters

SITE NAME LIKE 65069-#2 WEST #2-D119

ON/AFTER 10/01/1980 ON/BEFORE 09/30/2001

Report Parameters

SITE NAME LIKE 65069-#2 WEST #2-D119

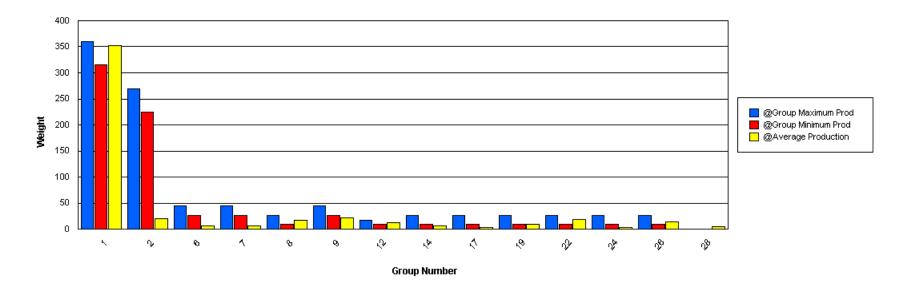
ON/AFTER 10/01/1979 ON/BEFORE 09/30/2001

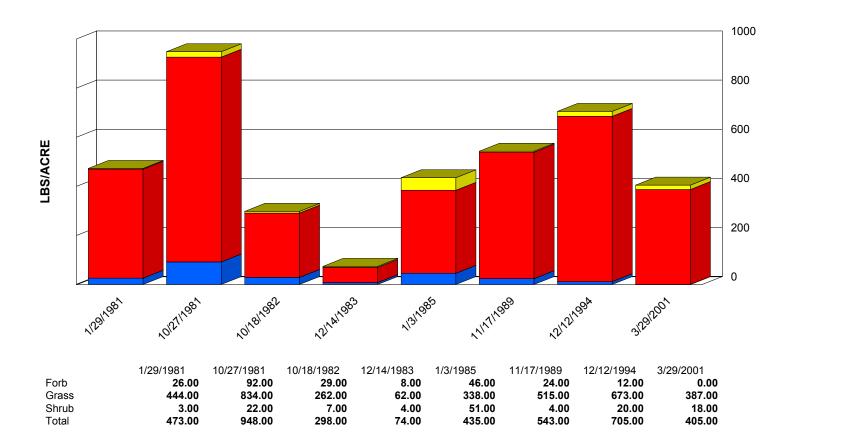
MIN LBS TO GRAPH 3

SELECTED ECOSITE 042CY007NM

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
1	Grass	HIMU2	315	360	41.00	594.00	305.50	182.02
1	Grass	SCBR2	315	360	19.00	71.00	46.50	18.79
2	Grass	BOER4	225	270	0.00	78.00	20.38	23.47
2	Grass	BOGR2	225	270	0.00	1.00	0.25	0.43
6	Grass	SPAI	27	45	0.00	17.00	6.00	7.46
7	Grass	ARIST	27	45	0.00	7.00	2.67	2.43
7	Grass	SPCR	27	45	0.00	15.00	4.50	5.00
8	Grass	PAOB	9	27	0.00	56.00	17.13	18.46
9	Grass	MUAR	27	45	0.00	26.00	10.75	8.98
9	Grass	MUAR2	27	45	0.00	35.00	11.00	13.98
11	Grass	ENDE	9	27	0.00	1.00	0.20	0.40
12	Grass	PAHA	9	18	0.00	56.00	13.00	18.25
14	Grass	TRMU	9	27	0.00	26.00	6.60	9.87
15	Grass	TRPI2	0	9	0.00	1.00	0.17	0.37
17	Grass	ERPU8	9	27	0.00	5.00	1.33	1.80
17	Grass	SPNE	9	27	0.00	17.00	2.83	6.34
18	Forb	SPHAE	9	27	0.00	5.00	1.00	1.83
19	Forb	CROTO	9	27	0.00	17.00	7.75	6.48
19	Forb	PENA	9	27	0.00	8.00	2.25	2.44
21	Forb	ERTE13	9	27	0.00	1.00	0.40	0.49
21	Forb	LEMO2	9	27	0.00	6.00	2.00	2.53
22	Forb	AAFF	9	27	0.00	32.00	10.50	10.30
22	Forb	PECTI	9	27	0.00	26.00	6.50	11.26
22	Forb	SAKA	9	27	0.00	6.00	1.20	2.40
23	Forb	AMBRO	9	27	0.00	2.00	0.40	0.80
24	Forb	CIOC	9	27	0.00	12.00	2.80	4.66

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
24	Forb	SOEL	9	27	0.00	2.00	0.83	0.69
26	Shrub	GUSA2	9	27	0.00	34.00	8.57	10.90
26	Shrub	OPUNT	9	27	0.00	17.00	5.50	5.83
28	Shrub	PRGL2	0	0	0.00	17.00	4.25	7.36



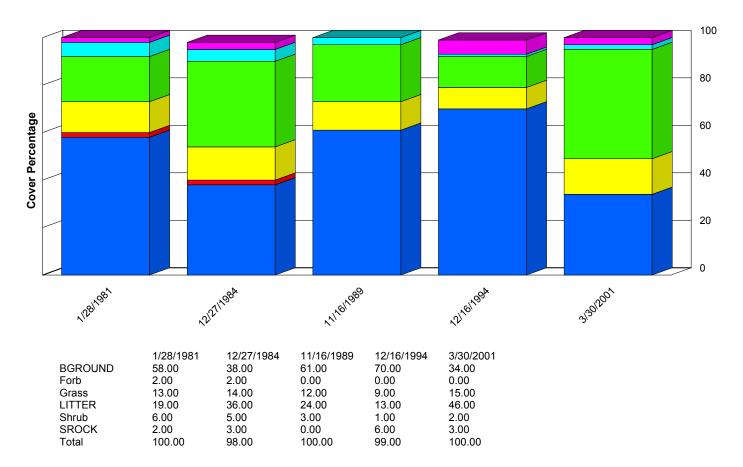


Shrub
Grass
Forb

Report Parameters

SITE NAME LIKE 65069-#2 WEST #2-D119

ON/AFTER 10/01/1980 ON/BEFORE 09/30/2001



SROCK
Shrub
LITTER
Grass

Forb
BGROUND

Report Parameters

SITE NAME LIKE 65069-#4 EAST #1-D121

ON/AFTER 10/01/1980 ON/BEFORE 09/30/2001

Report Parameters

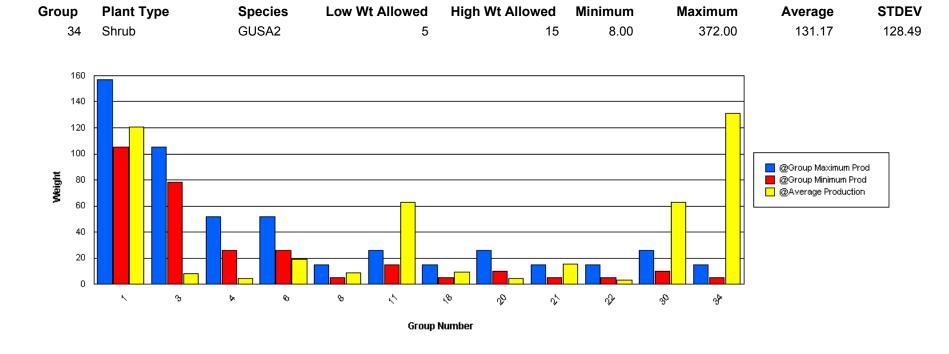
SITE NAME LIKE 65069-#4 EAST #1-D121

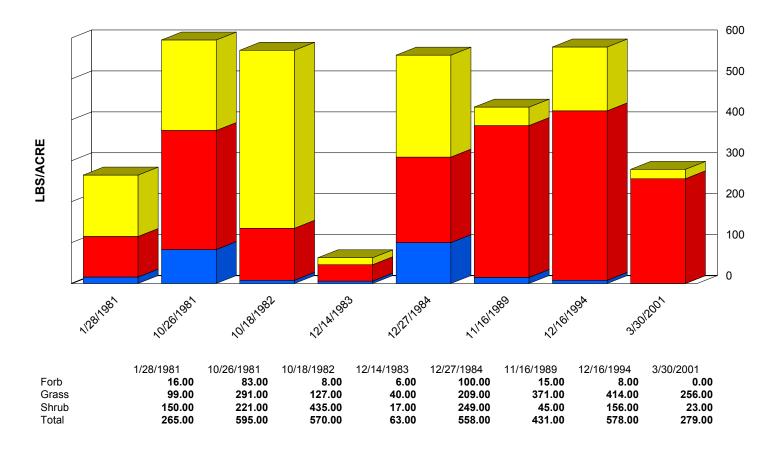
ON/AFTER 10/01/1979 ON/BEFORE 09/30/2001

MIN LBS TO GRAPH 3

SELECTED ECOSITE 042CY025NM

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
1	Grass	BOER4	105	157	20.00	278.00	120.75	81.29
3	Grass	BOGR2	78	105	1.00	22.00	8.00	9.90
4	Grass	MUPO2	26	52	0.00	16.00	4.50	5.12
6	Grass	SPCR	26	52	2.00	48.00	19.50	15.56
8	Grass	MUAR	5	15	0.00	34.00	8.50	10.51
10	Grass	ERPU8	5	15	0.00	6.00	1.33	2.13
11	Grass	ARIST	15	26	0.00	9.00	1.86	3.04
11	Grass	HIMU2	15	26	0.00	66.00	25.50	23.17
11	Grass	MUAR2	15	26	0.00	28.00	14.50	11.78
11	Grass	SCBR2	15	26	8.00	31.00	21.25	7.00
14	Grass	PAHA	5	15	0.00	5.00	1.17	1.86
14	Grass	SPAS	5	15	0.00	7.00	1.40	2.80
17	Forb	SPHAE	5	15	0.00	3.00	0.60	1.20
18	Forb	LESQU	5	15	0.00	37.00	9.50	14.30
19	Forb	CASSI	5	15	0.00	6.00	1.50	2.60
20	Forb	CROTO	10	26	0.00	11.00	4.63	3.77
21	Forb	AAFF	5	15	0.00	46.00	12.88	16.42
21	Forb	PECTI	5	15	0.00	7.00	1.75	3.03
21	Forb	XADR	5	15	0.00	4.00	0.67	1.49
22	Forb	CHAMA8	5	15	0.00	3.00	0.60	1.20
22	Forb	CRJA2	5	15	0.00	1.00	0.20	0.40
22	Forb	LEMO2	5	15	0.00	1.00	0.17	0.37
22	Forb	PENA	5	15	0.00	2.00	0.86	0.64
22	Forb	SOEL	5	15	0.00	5.00	1.60	2.06
30	Shrub	PRGL2	10	26	0.00	154.00	63.00	57.22
32	Shrub	OPUNT	5	15	0.00	3.00	0.71	1.16





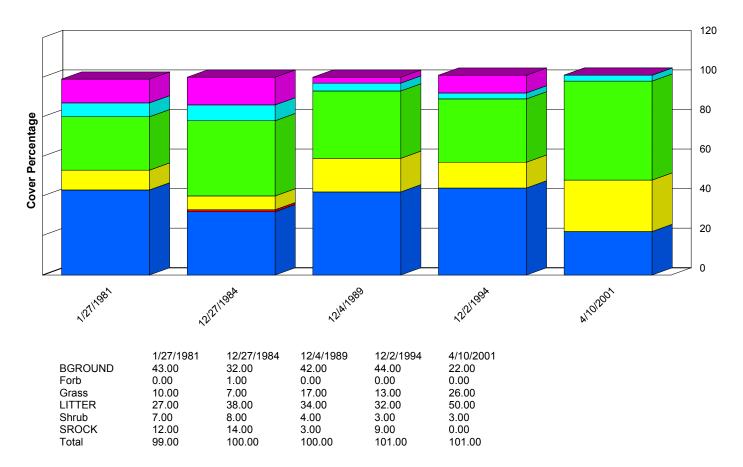
Shrub

Grass
Forb

Report Parameters

SITE NAME LIKE 65069-#4 EAST #1-D121

ON/AFTER 10/01/1980 ON/BEFORE 09/30/2001



SROCK
Shrub
LITTER

Grass
Forb
BGROUND

Report Parameters

SITE NAME LIKE 65069-#4 EAST #2-D122

ON/AFTER 10/01/1980 ON/BEFORE 09/30/2001

Report Parameters

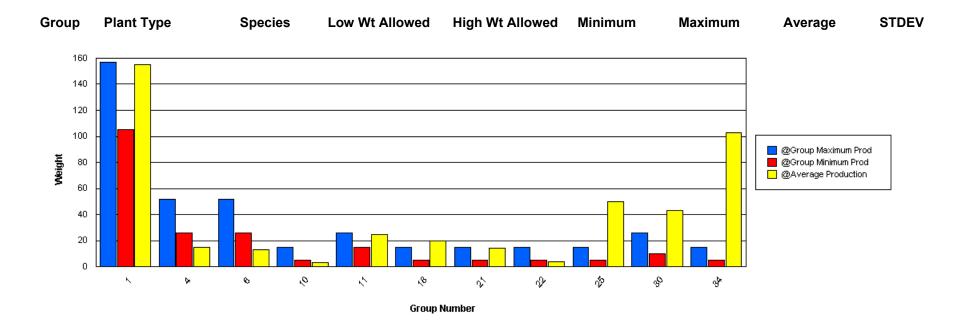
SITE NAME LIKE 65069-#4 EAST #2-D122

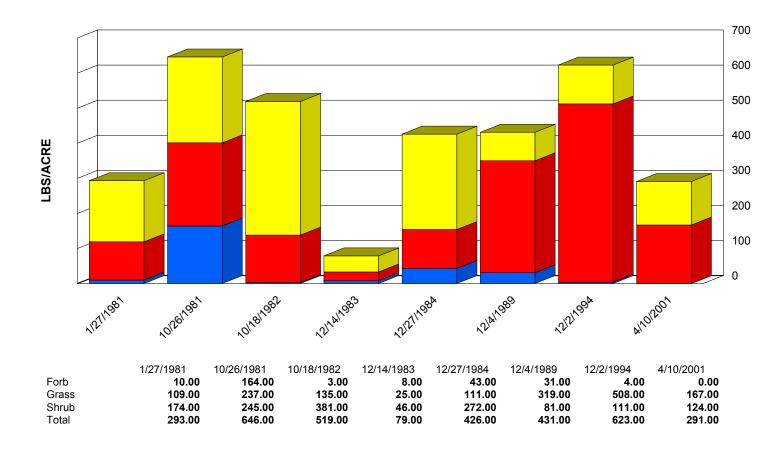
ON/AFTER 10/01/1979 ON/BEFORE 09/30/2001

MIN LBS TO GRAPH 3

SELECTED ECOSITE 042CY025NM

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
1	Grass	BOER4	105	157	5.00	478.00	155.00	138.63
4	Grass	MUPO2	26	52	0.00	46.00	15.13	15.30
6	Grass	SPCR	26	52	0.00	29.00	13.00	9.67
8	Grass	MUAR	5	15	0.00	4.00	1.13	1.36
10	Grass	ERPU8	5	15	0.00	10.00	3.00	3.16
11	Grass	ARIST	15	26	1.00	11.00	6.00	5.00
11	Grass	HIMU2	15	26	8.00	12.00	10.00	2.00
11	Grass	MUAR2	15	26	0.00	19.00	4.25	5.85
11	Grass	SCBR2	15	26	0.00	12.00	4.00	4.06
11	Grass	SPCO4	15	26	0.00	2.00	0.40	0.80
14	Grass	ENDE	5	15	0.00	3.00	0.67	1.11
18	Forb	LESQU	5	15	0.00	97.00	19.83	35.43
20	Forb	CROTO	10	26	0.00	6.00	1.57	2.26
21	Forb	AAFF	5	15	0.00	48.00	12.63	16.01
21	Forb	XADR	5	15	0.00	9.00	1.50	3.35
22	Forb	CHAMA8	5	15	0.00	2.00	0.40	0.80
22	Forb	CRJA2	5	15	0.00	0.00	0.00	0.00
22	Forb	LEMO2	5	15	0.00	6.00	1.33	2.21
22	Forb	PENA	5	15	0.00	2.00	1.20	0.98
22	Forb	SOEL	5	15	0.00	5.00	1.20	1.94
25	Shrub	LADI2	5	15	0.00	90.00	50.13	35.85
30	Shrub	PRGL2	10	26	0.00	105.00	43.00	39.50
34	Shrub	GUSA2	5	15	2.00	314.00	103.00	102.75





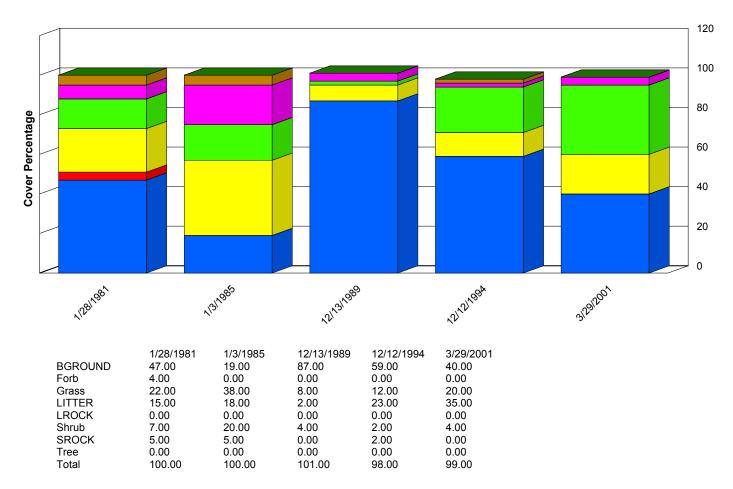
Shrub Grass

Forb

Report Parameters

SITE NAME LIKE 65069-#4 EAST #2-D122

ON/AFTER 10/01/1980 ON/BEFORE 09/30/2001



Tree SROCK

LROCK
LITTER
Grass
Forb

BGROUND

Shrub

Report Parameters

SITE NAME LIKE 65069-#6 WADE-D124 ON/AFTER 10/01/1980

ON/AFTER 10/01/1980 ON/BEFORE 09/30/2001

Report Parameters

SITE NAME LIKE 65069-#6 WADE-D124

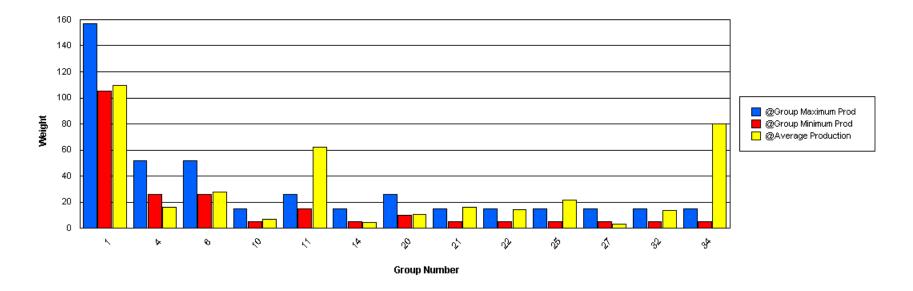
ON/AFTER 10/01/1979 ON/BEFORE 09/30/2001

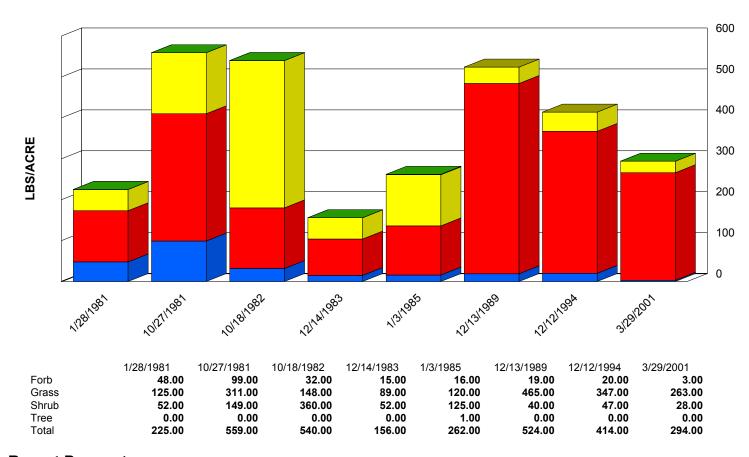
MIN LBS TO GRAPH 3

SELECTED ECOSITE 042CY025NM

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
1	Grass	BOER4	105	157	11.00	231.00	109.38	76.48
3	Grass	BOGR2	78	105	0.00	7.00	2.50	2.65
4	Grass	MUPO2	26	52	0.00	61.00	16.00	20.98
6	Grass	SPCR	26	52	5.00	77.00	27.25	23.27
6	Grass	SPFL2	26	52	0.00	4.00	0.80	1.60
7	Grass	TRPI2	15	26	0.00	1.00	0.20	0.40
8	Grass	MUAR	5	15	0.00	6.00	2.38	2.23
10	Grass	ERPU8	5	15	0.00	33.00	7.13	10.51
11	Grass	ANHA	15	26	0.00	3.00	0.75	1.30
11	Grass	ARIST	15	26	0.00	56.00	17.63	20.44
11	Grass	HIMU2	15	26	0.00	68.00	25.00	23.90
11	Grass	MUAR2	15	26	0.00	18.00	9.38	6.32
11	Grass	SCBR2	15	26	0.00	21.00	9.25	6.85
12	Grass	MUSQ	0	5	0.00	1.00	0.17	0.37
14	Grass	ENDE	5	15	0.00	3.00	0.83	1.07
14	Grass	PAHA	5	15	0.00	8.00	3.38	2.45
14	Grass	SPAS	5	15	0.00	1.00	0.20	0.40
18	Forb	LESQU	5	15	0.00	7.00	1.86	2.53
20	Forb	CROTO	10	26	0.00	17.00	6.14	5.25
20	Forb	CRPO5	10	26	0.00	1.00	0.17	0.37
20	Forb	DYAC	10	26	3.00	7.00	4.33	1.89
21	Forb	AAFF	5	15	0.00	40.00	8.88	12.12
21	Forb	PORTU	5	15	0.00	29.00	7.25	12.56
22	Forb	CHAMA8	5	15	0.00	1.00	0.20	0.40
22	Forb	COCA2	5	15	0.00	31.00	5.33	11.48
22	Forb	CRJA2	5	15	0.00	2.00	0.40	0.80

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
22	Forb	DYPE2	5	15	0.00	19.00	4.33	6.80
22	Forb	ERTE13	5	15	0.00	2.00	0.75	0.83
22	Forb	MELE2	5	15	0.00	6.00	2.00	2.24
22	Forb	PENA	5	15	0.00	1.00	0.50	0.50
22	Forb	SOEL	5	15	1.00	1.00	1.00	0.00
25	Shrub	LADI2	5	15	0.00	53.00	21.75	16.17
27	Shrub	COER5	5	15	0.00	9.00	3.25	3.83
32	Shrub	OPUNT	5	15	0.00	34.00	13.40	16.41
34	Shrub	GUSA2	5	15	0.00	273.00	79.86	92.73
35	Tree	YUEL	15	26	0.00	1.00	0.17	0.37
36	Shrub	DAFO	5	15	0.00	3.00	0.50	1.12





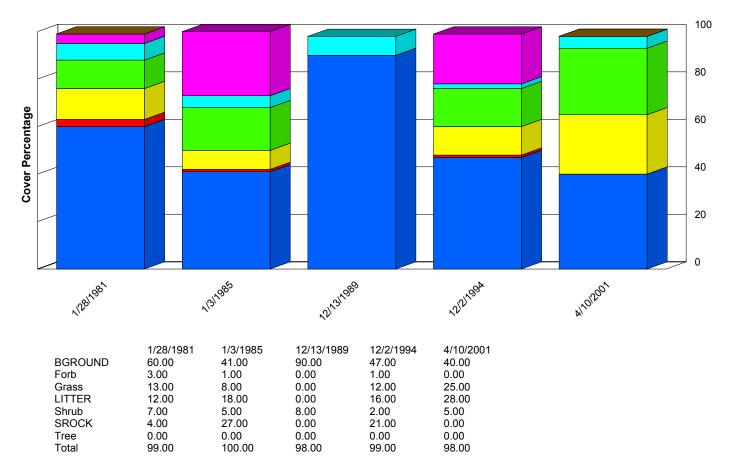
Tree

Shrub
Grass
Forb

Report Parameters

SITE NAME LIKE 65069-#6 WADE-D124

ON/AFTER 10/01/1980 ON/BEFORE 09/30/2001



Tree

Forb
BGROUND

SROCK
Shrub
LITTER
Grass

Report Parameters

SITE NAME LIKE 65069-#7 ODOM-D125 ON/AFTER 10/01/1980

ON/BEFORE 10/01/1980 09/30/2001

Report Parameters

SITE NAME LIKE 65069-#7 ODOM-D125

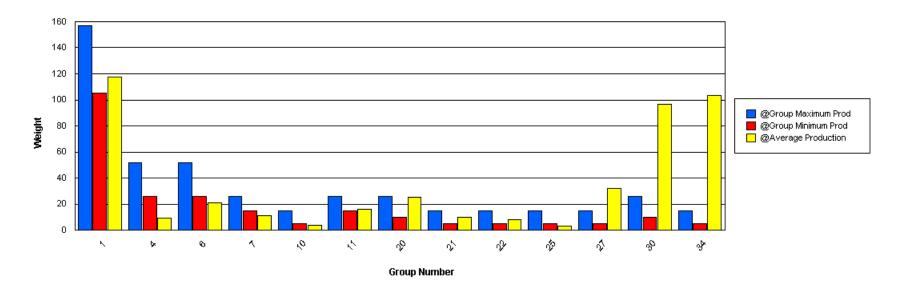
ON/AFTER 10/01/1979 ON/BEFORE 09/30/2001

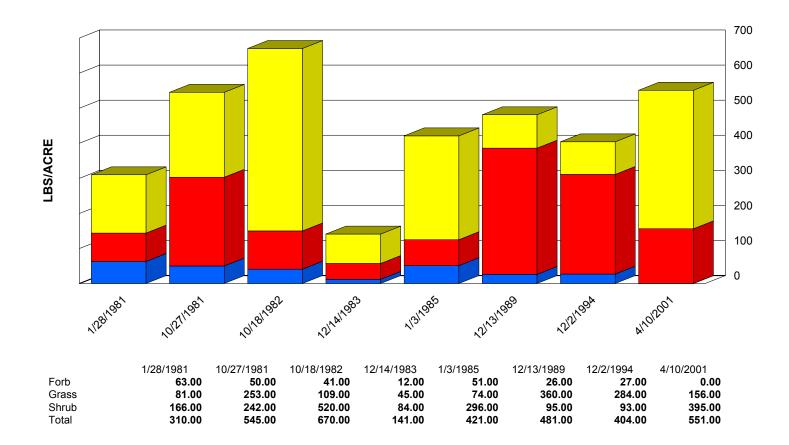
MIN LBS TO GRAPH 3

SELECTED ECOSITE 042CY025NM

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
1	Grass	BOER4	105	157	25.00	243.00	117.25	79.93
4	Grass	MUPO2	26	52	0.00	23.00	9.60	9.39
6	Grass	SPCR	26	52	5.00	56.00	19.25	19.79
6	Grass	SPFL2	26	52	0.00	9.00	1.83	3.29
7	Grass	TRIDE	15	26	0.00	5.00	1.25	2.17
7	Grass	TRMU	15	26	1.00	19.00	10.00	9.00
7	Grass	TRPI2	15	26	0.00	1.00	0.20	0.40
10	Grass	ERPU8	5	15	0.00	9.00	4.13	2.52
11	Grass	ARIST	15	26	0.00	32.00	11.13	10.65
11	Grass	MUAR2	15	26	0.00	6.00	2.13	2.09
11	Grass	SCBR2	15	26	0.00	5.00	1.17	1.86
11	Grass	SEMA5	15	26	0.00	5.00	1.50	2.06
14	Grass	ENDE	5	15	0.00	3.00	0.83	1.07
17	Forb	SPCO	5	15	0.00	13.00	2.60	5.20
18	Forb	LESQU	5	15	0.00	6.00	1.40	2.33
20	Forb	CROTO	10	26	0.00	35.00	13.25	11.01
20	Forb	DYAC	10	26	9.00	15.00	12.00	3.00
21	Forb	AAFF	5	15	0.00	20.00	9.88	8.15
22	Forb	CHAMA8	5	15	0.00	1.00	0.20	0.40
22	Forb	COCA2	5	15	0.00	6.00	1.60	2.33
22	Forb	CRJA2	5	15	0.00	1.00	0.20	0.40
22	Forb	DYPE2	5	15	0.00	4.00	1.20	1.60
22	Forb	LEFE	5	15	0.00	4.00	0.67	1.49
22	Forb	MELE2	5	15	0.00	11.00	2.00	4.04
22	Forb	PPFF	5	15	0.00	1.00	0.33	0.47
22	Forb	SOEL	5	15	0.00	6.00	1.75	2.49

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
25	Shrub	LADI2	5	15	0.00	7.00	3.50	3.04
27	Shrub	COER5	5	15	0.00	54.00	32.25	19.45
30	Shrub	PRGL2	10	26	0.00	336.00	96.63	127.84
34	Shrub	GUSA2	5	15	1.00	282.00	103.25	105.61
36	Shrub	DAFO	5	15	0.00	4.00	0.86	1.36





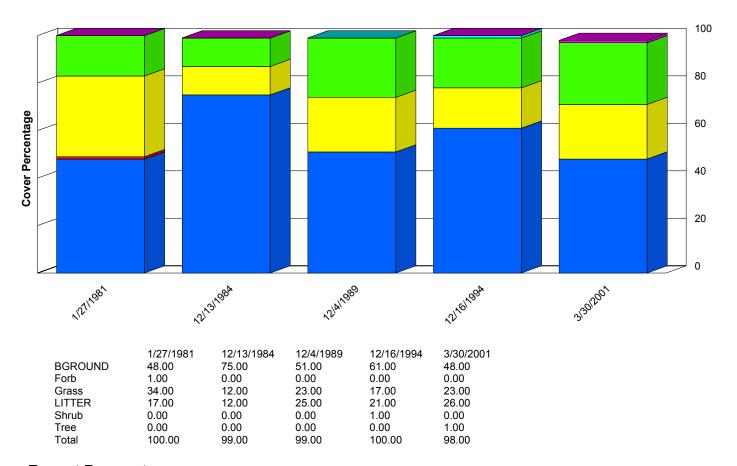
Shrub Grass

Forb

Report Parameters

SITE NAME LIKE 65069-#7 ODOM-D125

ON/AFTER 10/01/1980 ON/BEFORE 09/30/2001



Tree
Shrub
LITTER
Grass

Forb
BGROUND

Report Parameters

SITE NAME LIKE 65069-BLACK-D120 ON/AFTER 10/01/1980

ON/BEFORE 09/30/2001

Report Parameters

SITE NAME LIKE 65069-BLACK-D120

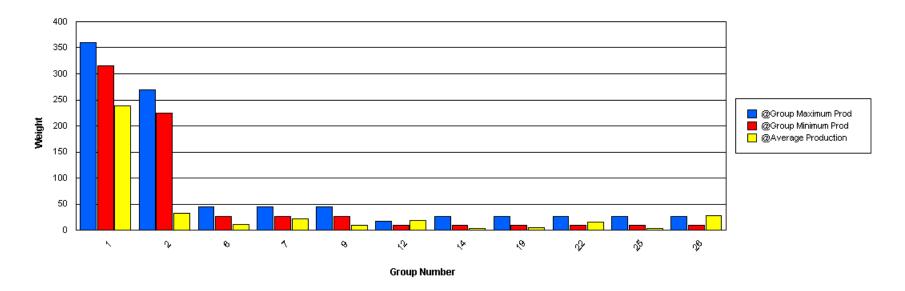
ON/AFTER 10/01/1979 ON/BEFORE 09/30/2001

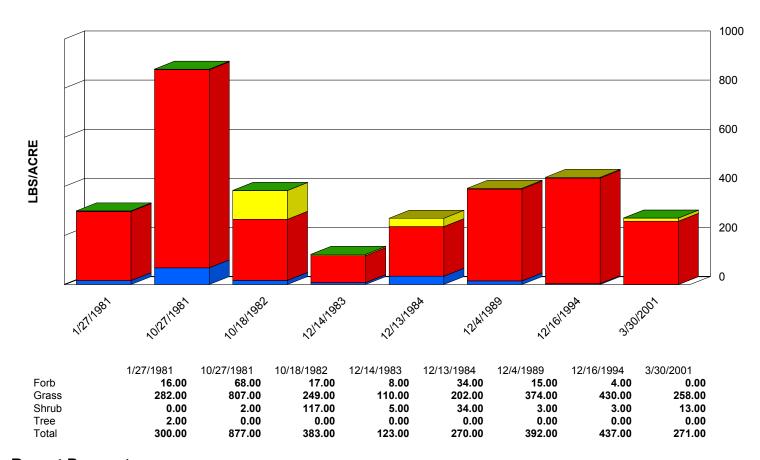
MIN LBS TO GRAPH 3

SELECTED ECOSITE 042CY007NM

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
1	Grass	HIMU2	315	360	44.00	546.00	189.13	151.99
1	Grass	SCBR2	315	360	16.00	116.00	50.00	31.10
2	Grass	BOER4	225	270	0.00	53.00	21.88	19.80
2	Grass	BOGR2	225	270	0.00	31.00	11.25	8.73
6	Grass	SPAI	27	45	0.00	24.00	11.13	9.49
7	Grass	ARIST	27	45	0.00	41.00	14.25	14.25
7	Grass	SPCR	27	45	0.00	20.00	7.43	7.13
8	Grass	PAOB	9	27	0.00	9.00	2.75	3.19
9	Grass	MUAR	27	45	0.00	7.00	4.00	2.78
9	Grass	MUAR2	27	45	0.00	10.00	5.29	3.92
12	Grass	PAHA	9	18	0.00	117.00	18.25	37.84
14	Grass	TRMU	9	27	0.00	7.00	3.00	3.08
15	Grass	TRPI2	0	9	0.00	7.00	1.86	2.70
17	Grass	ERPU8	9	27	0.00	5.00	1.40	1.85
18	Forb	SPHAE	9	27	0.00	1.00	0.17	0.37
19	Forb	CROTO	9	27	0.00	7.00	2.29	2.25
19	Forb	CRPO5	9	27	0.00	2.00	0.33	0.75
19	Forb	LEFE	9	27	0.00	3.00	0.50	1.12
19	Forb	LESQU	9	27	0.00	4.00	1.00	1.73
19	Forb	PENA	9	27	0.00	4.00	1.43	1.29
21	Forb	ERTE13	9	27	0.00	0.00	0.00	0.00
21	Forb	LEMO2	9	27	0.00	2.00	0.40	0.80
22	Forb	AAFF	9	27	0.00	60.00	14.13	19.17
22	Forb	CIRSI	9	27	0.00	2.00	1.00	1.00
24	Forb	CIOC	9	27	0.00	5.00	1.00	2.00
24	Forb	SOEL	9	27	0.00	1.00	0.33	0.47

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
24	Forb	ZIGR	9	27	0.00	1.00	0.33	0.47
25	Shrub	EPHED	9	27	0.00	6.00	3.33	2.49
25	Shrub	EPTO	9	27	0.00	2.00	0.33	0.75
26	Shrub	GUSA2	9	27	0.00	96.00	23.67	34.05
26	Shrub	OPUNT	9	27	0.00	17.00	4.20	6.46
26	Tree	YUEL	9	27	0.00	2.00	0.40	0.80





Tree

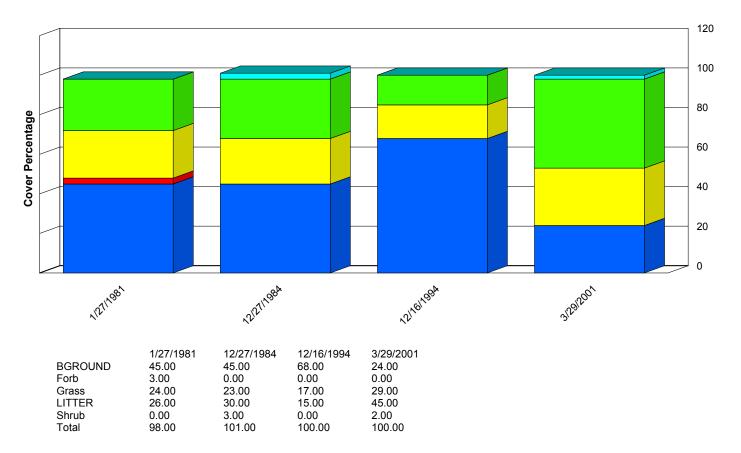
Shrub Grass

Forb

Report Parameters

SITE NAME LIKE 65069-BLACK-D120

ON/AFTER 10/01/1980 ON/BEFORE 09/30/2001



Shrub
LITTER
Grass

Forb
BGROUND

Report Parameters

SITE NAME LIKE 65069-SHIPPING TRAP-D123 ON/AFTER 10/01/1980 ON/BEFORE 09/30/2001

Report Parameters

SITE NAME LIKE 65069-SHIPPING TRAP-D123

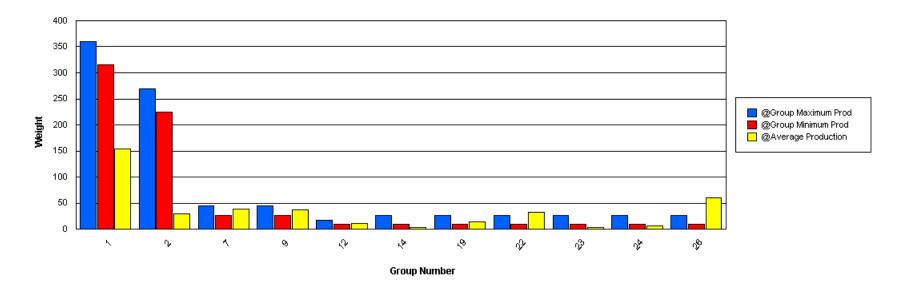
ON/AFTER 10/01/1979 ON/BEFORE 09/30/2001

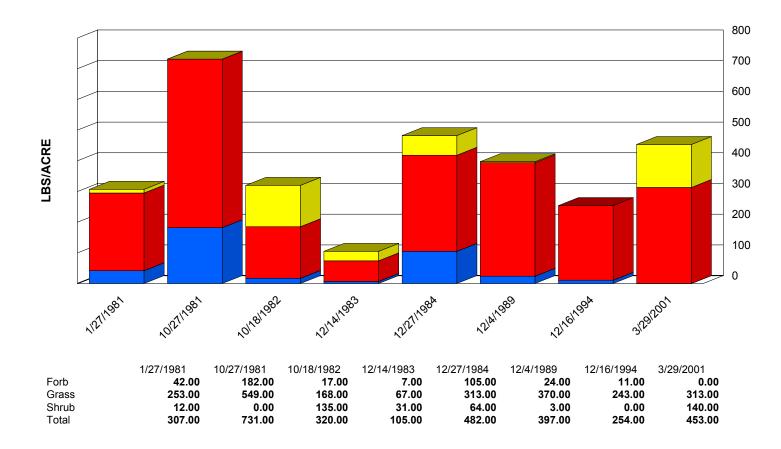
MIN LBS TO GRAPH 3

SELECTED ECOSITE 042CY007NM

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
1	Grass	HIMU2	315	360	0.00	259.00	83.00	84.32
1	Grass	SCBR2	315	360	20.00	121.00	71.00	32.71
2	Grass	BOER4	225	270	0.00	62.00	20.75	20.72
2	Grass	BOGR2	225	270	0.00	31.00	9.13	9.83
7	Grass	ARIST	27	45	0.00	41.00	16.50	12.09
7	Grass	SPCR	27	45	8.00	35.00	21.88	7.96
8	Grass	PAOB	9	27	0.00	9.00	1.71	3.15
9	Grass	MUAR	27	45	0.00	34.00	11.38	12.05
9	Grass	MUAR2	27	45	0.00	71.00	26.63	24.23
12	Grass	PAHA	9	18	0.00	66.00	11.50	21.25
14	Grass	TRMU	9	27	0.00	12.00	4.00	5.66
15	Grass	TRPI2	0	9	0.00	1.00	0.43	0.49
17	Grass	ERPU8	9	27	0.00	3.00	1.75	1.30
18	Forb	SPHAE	9	27	0.00	5.00	1.00	2.00
19	Forb	CROTO	9	27	0.00	19.00	6.25	6.16
19	Forb	LESQU	9	27	0.00	16.00	4.00	6.93
19	Forb	PENA	9	27	0.00	17.00	4.25	5.14
20	Forb	ASTRA	9	27	0.00	1.00	0.17	0.37
21	Forb	ERTE13	9	27	0.00	0.00	0.00	0.00
22	Forb	AAFF	9	27	0.00	119.00	23.00	37.10
22	Forb	XADR	9	27	0.00	57.00	9.50	21.24
23	Forb	AMBRO	9	27	0.00	13.00	2.60	5.20
23	Forb	CHAMA8	9	27	0.00	2.00	0.40	0.80
24	Forb	CIOC	9	27	0.00	2.00	0.50	0.87
24	Forb	COCA2	9	27	0.00	2.00	0.40	0.80
24	Forb	MELE2	9	27	0.00	1.00	0.20	0.40

Group	Plant Type	Species	Low Wt Allowed	High Wt Allowed	Minimum	Maximum	Average	STDEV
24	Forb	SOEL	9	27	0.00	16.00	4.25	6.80
24	Forb	ZIGR	9	27	0.00	4.00	0.80	1.60
26	Shrub	COER5	9	27	0.00	2.00	0.40	0.80
26	Shrub	GUSA2	9	27	0.00	135.00	38.50	48.76
26	Shrub	OPUNT	9	27	0.00	140.00	21.57	48.42





Shrub

Grass
Forb

Report Parameters

SITE NAME LIKE 65069-SHIPPING TRAP-D123

ON/AFTER 10/01/1980 ON/BEFORE 09/30/2001

